

## REMARKS

Reconsideration of the above-identified patent application in view of the amendments above and the remarks following is respectfully requested.

Claims 1-39 are in this case. Claims 8-12, 15-18, 26-30 and 33-37 were withdrawn by the Examiner from consideration as drawn to a non-elected species. Claims 1-7, 13, 14, 19-25, 31, 32, 38 and 39 have been rejected under § 103(a). Independent claims 1 and 19 and dependent claim 21 have been amended.

The claims before the Examiner are directed toward a method and system of adding utility to a single video camera. The camera is attached to a cellular telephone. A plurality of frames acquired by the camera are processed, either in the camera or in a device that receives the frames from the camera, by mosaicing followed by optical character recognition. The mosaicing includes compensation for movement of the cellular telephone as the frames are acquired.

### § 103(a) Rejections – Wilska et al., ‘078 in view of Taylor et al. ‘469

The Examiner has rejected claims 1-7, 13, 14, 19-25, 31, 32, 38 and 39 under § 103(a) as being unpatentable over Wilska et al., US Patent No. 6,427,078 (henceforth, “Wilska ‘078”) in view of Taylor et al., US Patent No. 6,493,469 (henceforth, “Taylor et al. ‘469”). The Examiner’s rejection is respectfully traversed.

Wilska et al. ‘078 teach a notebook computer **3** that includes a camera unit **14** and a cellular telephone **17**. The functionality of camera unit **14** includes acquiring images of documents and processing the documents, for example by character recognition (column 5 line 7).

As best understood, camera unit **14** acquires and processes image frames one at a time. Notebook computer **3** therefore lacks the ability of the present invention to

mosaic two or more image frames and then perform optical character recognition on the mosaiced frames. The Examiner therefore now has cited Taylor et al. '469 as teaching such mosaicing followed by optical character recognition. Specifically, Taylor et al. '469 teaches a document scanning apparatus **100** that includes a general purpose computer **110** and two fixed video cameras **107** and **109**. Each video camera **107** and **109** captures a respective image of a different portion of a hardcopy document **104**. Among software modules **204** of general purpose computer **110** is a frame merger module **218** that mosaics the two images and performs optical character recognition on the combined image. The Examiner proposes that the present invention is an obvious combination of the teachings of Wilska et al. '078 and Taylor et al. '469.

Applicant respectfully disagrees. The present invention is directed at processing images that are acquired sequentially by a single video camera that is aimed manually. This is in contrast to how Taylor et al. '469 acquire their images. Taylor et al. '469 use two video cameras **107** and **109** that are fixed in place relative to hardcopy document **104**, as stated in column 3 lines 8-13:

...the image acquisition system **105** includes two video cameras **107** and **109** that are positioned in video camera housings **106** and **108**, respectively. The video camera housings **106** and **108** are supported in stationary positions above the surface **102** by a camera mount **118** that is fixedly attached to the surface **102**. (emphasis added)

Furthermore, the two images that are mosaiced are acquired simultaneously (column 3 lines 38-39), not sequentially. Therefore, one ordinarily skilled in the art would not turn to Taylor et al. '469 to learn how to perform mosaicing of images acquired sequentially by a single, manually aimed video camera attached to a cellular telephone.

While continuing to traverse the Examiner's rejections, Applicant has, in order to expedite the prosecution, chosen to amend independent claims 1 and 19 and dependent claim 21 in order to clarify and emphasize the crucial distinctions between the present invention and the combined teachings of Wilska et al. '078 and Taylor et al. '469. Specifically, claims 1, 19 and 21 have been amended to state that a single video camera is used, and claims 1 and 19 have been amended to state that the video camera(s) is/are aimed manually and that the plurality of frames is captured sequentially. The use of a single video camera is supported in the specification in Figure 1 that shows a single video camera 62 attached to cell phone 68. Manual aiming of the video camera and sequential capture of frames are explicitly part of embodiments of the present invention, other than the one presently claimed, that are described in the specification, and so are implicitly part of the mosaicing and optical character recognition embodiment that is presently claimed. Specifically, aiming the video camera(s) manually is part of the barcode capture scenario on page 16 lines 18-19:

Max aims camera 62 of his cellphone 68 at barcode 75 on the price tag of the hat. (emphasis added)

Capturing video frames sequentially (*i.e.*, as a video stream) is a necessary precondition for the "merging of at least two video streams" (page 13 line 8) and for the detection of visually detectable motion (page 16 lines 10-11: "Visually detectable motion may be used to define important portions of the video stream"). Capturing frames sequentially also is inherent in the functioning of a single video camera.

With independent claims 1 and 19 allowable in their present form, it follows that claims 2-7, 13, 14, 20-25, 31, 32, 38 and 39, that depend therefrom, also are allowable.

In view of the above amendments and remarks it is respectfully submitted that independent claims 1 and 19, and hence dependent claims 2-7, 13, 14, 20-25, 31, 32, 38 and 39 are in condition for allowance. Prompt notice of allowance is respectfully and earnestly solicited.

Respectfully submitted,



---

Mark M. Friedman  
Attorney for Applicant  
Registration No. 33,883

Date: June 11, 2006